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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,958	04/15/2005	Herbert Kurzinger	12742.105USWO	2999
23552 7590 10/02/2009 MERCHANT & GOULD PC P.O. BOX 2903			EXAMINER	
			SAYALA, CHHAYA D	
MINNEAPOLIS, MN 55402-0903			ART UNIT	PAPER NUMBER
			1794	
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			10/02/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/509,958	KURZINGER ET AL.				
Office Action Summary	Examiner	Art Unit				
	C. SAYALA	1794				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 7/31/3	2009					
	action is non-final.					
<i>,</i> —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
• 4)⊠ Claim(s) <u>1-12,14 and 16-18</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-12, 14, 16-18</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
· · · <u> </u>						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ acce						
Applicant may not request that any objection to the c						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) X Notice of References Cited (PTO-892)	4) ☐ Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
3) ☑ Information Disclosure Statement(s) (PTO/SB/08) 5) ☑ Notice of Informal Patent Application Paper No(s)/Mail Date <u>8/5/2005</u> . 6) ☑ Other:						
. apss(s)						

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-12, 14, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1351878, Axelrod and DE 3212406 in view of JP 57-43220 and Rossen et al. (US Patent 3851084) taken with Nonaka et al. (US Patent 4757948) and Blanchard et al. (US Patent 5143740) and further in view of Crews (US Patent 6207202), Cinquemani (US Patent 4239782) and Kim (US Patent 5773051) taken in view of GB 768189.

The GB patent teaches a food bar for fish that has different layered sections, each section or layer containing a different type of feed. See col. 1 on page 2. See Fig. 2. The layers are also said to have different textures, one being hard and others, soft. Note that at page 1, lines 80-85, the patent points to the embodiment of instant claim 10. Similarly, Axelrod teaches pellets used to feed fish that have different layers of various densities so that the pellets initially float and loosen some food from the outer layers before sinking further and loosening more food mid-level for fish that inhabit that level of water and then sinking to the bottom where the remaining food from the

innermost layer of the pellet is released. See col. 2 and col. 3. Col. 3, lines 45+ show that the surface layer is provided with lard and gas-releasing capabilities. This addresses instant claims such as claims 3, 5, 10 and 13. Again, the patent does not teach making flakes. DE '406 discloses a fish feed which is in the form of layers wherein the layers of various colors, auxiliaries, nutrients or active compounds are applied as different layers and are compressed together, thereby achieving different patterns and color markings on the film or flake. The patent does not teach extruding the layers although compressing them using pressure rollers is shown.

JP '220 teaches a feed "in the form of plates" as feed for marine animals, that is made by extrusion and then flattened by a flattening press. See page 4, last paragraph and page 5, first paragraph. Page 6, second paragraph describes the process in detail wherein the raw material mixture is extruded and then the pellets are flattened to the desired thickness by using rotating rollers.

Rossen et al. teach a method of producing laminated food products wherein a plurality of dissimilar homogeneous doughs are coextruded. The patent states at col. 1, lines 20+ that the snack product is prepared by laminating layers of differing doughs to produce the resulting laminate, and the patent goes on to state that: "It has been proposed that the individual layers may have different flavors, may have different textures, may be formed of substantially different materials, or may be different colors." The patent shows that the doughs could have different viscosities also. Further at col. 10, lines 13-16, the patent teaches that the dissimilar doughs are then extruded and further processed such as being flaked with flaking rolls (see also col. 3, lines 27-28 and

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claims 1 and 2). At col. 4, lines 53+, patentees describe extruding the materials so that a solid concentric extrudate is formed using a coextrusion method wherein the product such as in Fig. 23 is obtained. A cylindrical center of one material and a layer of a second material around it is shown. To subject any of the materials of the above patents obtained, to such extrusion and then to flaking rolls as in the JP patent '220 would have been obvious to obtain a flake feed as in that patent. Nonaka et al. is being used here, only to show that the flaking roll is used in roller mills (see Example 2, specifically at lines 34-35). Therefore, it would have been obvious to use extrusion and roller mills to make the laminates of the feed pellets of the prior art references, namely the GB, the Axelrod and DE patents, which do not teach how to make their products but do teach that their product has dissimilar ingredients. With regard to claim 4, while the primary patents teach fat ingredients, it would have been obvious to one of ordinary skill in the art at the time the invention was made that lipophilic substances such as fatsoluble vitamins are generally a part of fish feed. With regard to claim 7, Axelrod renders obvious the concept that varying density varies with the differences in layers having varying food ingredients, while the arrangement of the fish feed components being at various levels of the pellet itself and fat being on the surface layer suggests that it would have been obvious to change this and have the protein on the surface and the fat on the inside, this being a matter of choice depending on whether the Axelrod product is required to float or sink and to the degree that the pellet should float or sink. With regard to claim 14, wherein the cross section of the extrudate is increased during the rolling out, one of ordinary skill in the art would have reasonably expected that when

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the pellet in the JP '220 patent is subjected to roller mills, then it would have been flattened out to a flake and it would be inherent that the cross section upon flattening out would be larger. However, Blanchard et al. reinforces this position by showing that the material is stretched by the flaking process. Blanchard is drawn to extrusion and roller mill processes to flake the extrudate. See the entire patent.

With regard to the incorporation of antibiotics, antioxidants and immunestimulating agents, it is well known that many vitamins have inherent antioxidant properties, such as vitamin C and E, and further, vitamin E has immune-stimulating properties as well, also well known. (See PTO form 892, which provides the evidentiary reference, Alexander et al. at col. 1, lines 50-55). Crews incorporates vitamins into flaked fish feed. See claim 1. Cinquemani shows making flakes for fish feed from a conventional mixture that contains a vitamin premix (Table @ col. 2, col. 2, lines 3-20). Kim teaches a flaked fish containing vitamins (see col. 2, lines 33-37, Example 1 and claim 1). Such references taken with the GB patent that is a teaching reference with regard to the manufacture of vitamin or antibiotic-containing flaked feeds, vitamins and antibiotics already identified by prior art as being heat and steam sensitive, renders the subject matter now claimed, i.e. the incorporation of vitamins which are immunestimulating and antioxidants or of antibiotics, in fish feeds of the flake-form, prima facie obvious. See claim 1 in the GB patent as well as page 2, line 44 to line 82 and Examples.

## Response to Arguments

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Applicant's arguments with respect to claims 1-12, 14, 16-18 have been considered but are moot in view of the new ground(s) of rejection.

## Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Sayala, whose telephone number is (571) 272-1405. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. SAYALA/ Primary Examiner, Art Unit 1794